

Claims

1. A synchronous digital hierarchy tributary module supporting multiple service processing, including a Synchronous Digital Hierarchy (SDH) tributary processing unit
5 and service processing units; wherein there are at least two service processing units connected with the SDH tributary processing unit respectively, for mapping and unmapping corresponding service signals; the SDH tributary processing unit is for multiplexing and demultiplexing multiple service signals in an SDH signal.

2. The synchronous digital hierarchy tributary module supporting multiple service
10 processing according to claim 1, wherein each of the service processing units is connected directly to a corresponding local interface respectively.

3. The synchronous digital hierarchy tributary module supporting multiple service processing according to claim 2, wherein the tributary module further includes a multiple service cross processing unit which is used to implement interconnection among
15 different services, each service processing unit being connected to a local interface through the multiple service cross processing unit.

4. The synchronous digital hierarchy tributary module supporting multiple service processing according to claim 1, 2 or 3, wherein the SDH tributary processing unit separates out the service signals corresponding to different service processing units,
20 according to different time slots corresponding to the SDH signals of different services.

5. The synchronous digital hierarchy tributary module supporting multiple service processing according to claim 1, 2 or 3, wherein a cross module of a SDH equipment node time-division multiplexes multiple service SDH signals into one SDH signal.

25 6. The synchronous digital hierarchy tributary module supporting multiple service processing according to claim 1, 2 or 3, wherein the services to be sent from the local to the SDH side are mapped by the service processing units respectively and sent to the

SDH tributary processing unit for multiplexing, different services being multiplexed in different time slots, and the cross module of the SDH equipment node transmits the signals of different time slots to the corresponding line modules or other tributary modules.

5 7. An SDH equipment node using the synchronous digital hierarchy tributary module according to claim 3, including a plurality of local interfaces, a plurality of line modules, a cross module connected with the line modules respectively and a plurality of SDH tributary modules connected with the cross module respectively; wherein the SDH tributary module comprises an SDH tributary processing unit and at least two service
10 processing units connected with the SDH tributary processing unit respectively, the service processing unit being for mapping and unmapping corresponding service signal, and the SDH tributary processing unit being for multiplexing and demultiplexing multiple service signals in an SDH signal, each of the service processing units being directly connected with a corresponding local interface respectively.

15 8. The SDH equipment node according to claim 7, wherein the SDH tributary processing unit separates out the service signals corresponding to different service processing units, according to different time slots corresponding to the SDH signals of different services.

20 9. The SDH equipment node according to claim 7, wherein the cross module of the SDH equipment node time-division multiplexes multiple service SDH signals into one SDH signal.

25 10. The SDH equipment node according to claim 7, 8 or 9, wherein the services to be sent from the local to the SDH side are mapped by the service processing units respectively and sent to the SDH tributary processing unit for multiplexing, different services being multiplexed in different time slots, and the cross module of the SDH equipment node transmits the signals of different time slots to the corresponding line modules or other tributary modules.